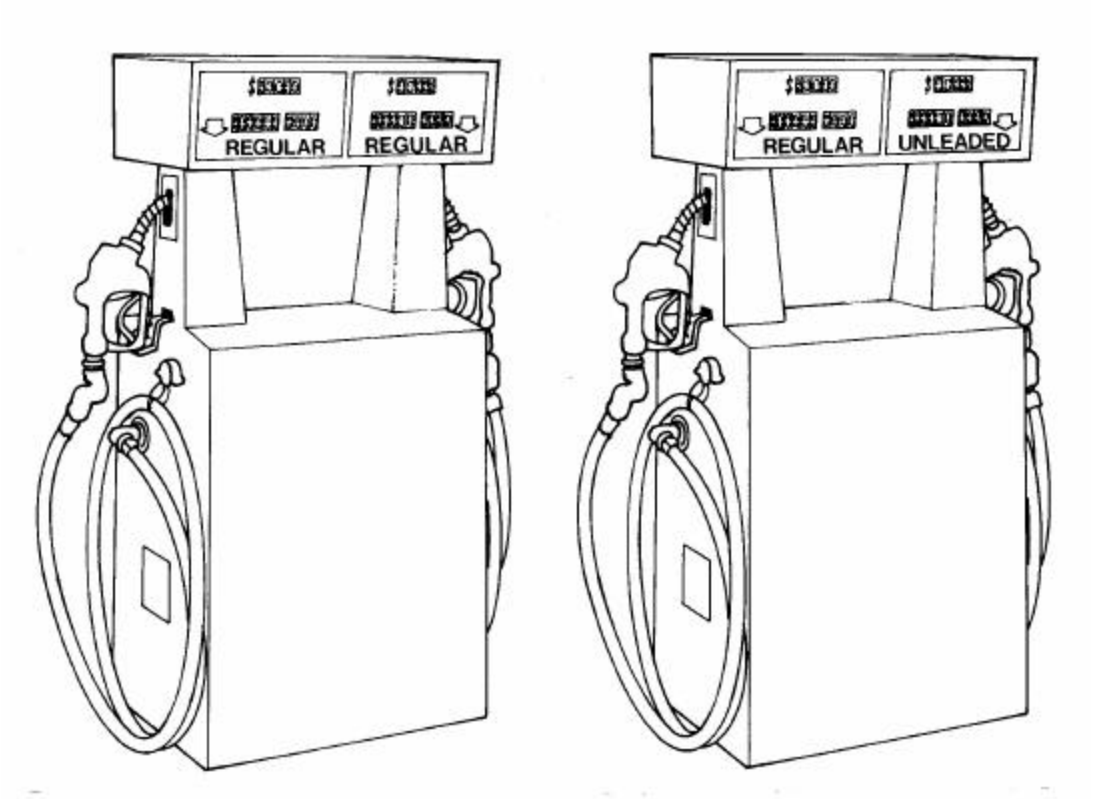


Executive Report on Gasoline Price Increases

Prepared for the Honorable John G. Rowland, Governor

STATE OF CONNECTICUT

Department of Consumer Protection
Edwin R. Rodriguez, MBA, Commissioner

November 19, 2003

Preface

In August 2003, Connecticut Governor John G. Rowland directed the State Department of Consumer Protection to investigate the sudden price increase of gasoline during the latter half of the month of August. The Department of Consumer Protection (DCP) has investigated the situation with the assistance of the Office of Policy and Management (OPM) as well as other involved state agencies. The Department has also benefited from research provided by the Energy Information Agency of the U. S. Department of Energy.

Abstract

In response to a directive from Governor John G. Rowland, the Connecticut Department of Consumer Protection investigated the rapid rise in gasoline prices in late August of 2003. As far as could be determined, the shortages resulted from a wide variety of factors. The previous cold winter had depleted inventory stocks and diverted that inventory from gasoline to heating oil. Several west coast refineries experienced significant outages, and the failure of a pipeline that delivers gasoline to Phoenix, Arizona from Tucson negatively impacted refinery stocks of gasoline in California, causing increased price pressure in the nation. Finally, the power failure on August 14th shut down multiple refineries in the Midwest just before a major holiday, during a time of record demand.

As a result of these factors, gasoline prices increased sharply during August. Although increasing less than gasoline prices, diesel prices also rose during August because of inventory reductions and some lost production.

As far as can be determined, there did not appear to be any widespread attempt to profit from this crisis, at least in the wholesale or retail segments of the marketplace. Surveys were initiated among a random sampling of gasoline stations licensed by DCP and among all known wholesale distributors/suppliers of fuel in Connecticut, requesting pricing data and other costs. As a result of a review of that data and taking into account the increased base price of gasoline, profit and marketing margins apparently did not appreciably increase during this period.

DCP also engaged in ongoing price surveys, with pricing appearing to be consistent with national data.

Introduction

Accounting for inflation, the Energy Information Agency (EIA) reports that the overall price of gasoline has remained fairly stable for the last twenty-five years. However, there have been and probably will continue to be periods of rapid price increases related to both crude oil prices and to the supply of the reformulated gasoline constituent[1] used in Connecticut and New York. Both factors either alone or in concert are typically instrumental in gasoline price advances.

Underlying those factors is the supply and demand dynamic, both for crude and finished gasoline stocks. While inter-related, inventories of both crude and finished gasoline can exert separate market forces. Crude supply obviously has the greater influence, but because of the time involved in the process of refining, there can be short-term discontinuities based on finished inventory shortages despite having an adequate supply of raw stock. It has been pointed out that despite record demand there hasn't been a new refinery constructed in the nation in 20 years and if fact there has been significant consolidation in the companies engaged in refining with the concurrent closure of smaller refineries.

As reported by the EIA in April of 2003 in its *Summer Motor Gasoline Outlook*, gasoline demand was expected to be high, with lower inventories of gasoline and crude stocks reported than previous years. The situation was predicted to result in higher prices as compared against the previous summer. Factors cited behind these inventory shortfall estimates were related to ongoing concerns about the Middle East, continued political instability in Venezuela and Nigeria, (two significant suppliers to the U. S. market), and a colder than normal winter, which diminished crude stocks by redirecting refined output from gasoline to heating oil. Ongoing deficits in normal gasoline and crude inventories were also cited as factors for the EIA predicted spread of 16 cents plus or minus, with a 95 percent confidence interval, on the national average price per gallon forecasted at $1.56[2]. This forecast however, was accompanied by a disclaimer that only validated the amount in a climate not beset by "new disruptions."

Actual EIA-projected demand for gasoline nationally was placed at 9.18 million barrels per day, up over 1.6 percent for a new record in demand. Gasoline stocks were estimated at 200 million barrels, or 13 million barrels less than the same time the previous year with no significant expected advance on existing

[1] Connecticut uses Reformulated Gasoline (RFG) statewide as means to address the non-attainment of the State with respect to ozone formation. EPA estimates that this on average adds an additional one to two cents for each gallon produced.

[2] Partly because of the use of reformulated product, taxes, and shipping costs, the average regional price in the Northeast trends slightly higher than national predicted averages.

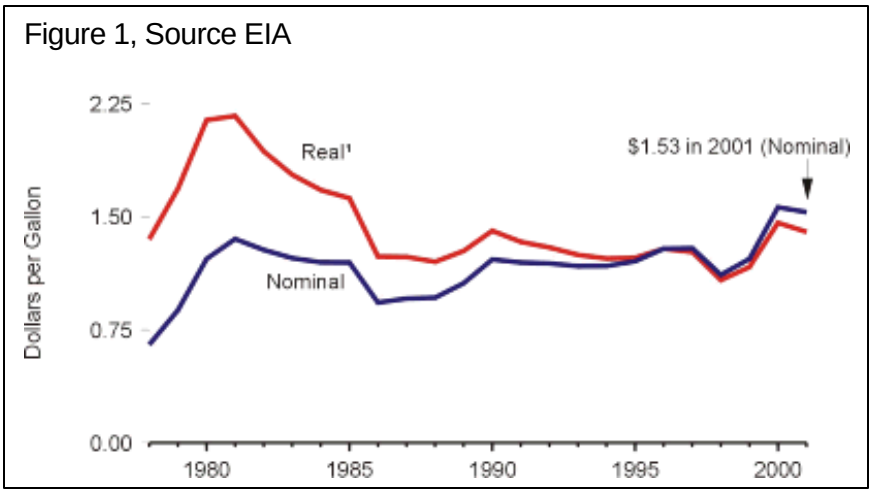
stocks and even greater reliance on imported fuels anticipated. Crude inventories were also down for reasons given above.

It should be noted that the Northeast is a significant market for imported finished gasoline or gasoline constituents. Imports comprise 45% of the daily demand or 434,000 barrels per day (EIA, 2003) in the region. The remainder is made up from domestic East Coast and Gulf Coast refiners, respectively. Imports and domestic supplies arrive in the major terminal areas of New York and New Jersey, the prime regional transit area for gasoline and other fuel products to Connecticut and the Northeast not serviced by pipelines.

Supplies into this terminal can arrive either by pipeline from domestic refiners in the Philadelphia/New Jersey area, or by vessels originating domestically or from overseas. Exports from the terminal are typically barged to Connecticut and other states where they are either re-piped or trucked to a final destination.

As recorded by the Connecticut Office of Policy and Management, between August 11, and August 25, 2003, the average retail price for regular gasoline in Connecticut rose by 24 cents per gallon, one of the largest increases ever recorded by OPM. Nationally, the increase was slightly moderated and was reported as a 17 cent per gallon increase[3]. This price is still less, accounting for inflation, than the highest recorded average national price of gasoline, as measured in March of 1981 (Figure 1[4]). However, the speed and climb of this price advance provoked significant concern from the driving public.

Figure 1, Source EIA



[3] Measurements are slightly different for OPM and EIA. OPM does bi-monthly readings, while EIA readings are done weekly.

[4] It is our understanding that these figures do not represent all the costs seen at the retail dispenser.

As can best be determined, the rapid price increases in gasoline that occurred during August 2003 in Connecticut and the nation resulted from a series of events occurring at a time when demand was high and inventories of finished product were low, combined with a system of supply that was nearing maximum capacity and thus very susceptible to disruption from relatively minor disturbances.

It appears that the trigger point for the disruptions that caused the rapid increase in price in Connecticut and the country as a whole can be traced to the power failure on August 14. There were of course, other pre-existing problems in the western states that contributed to supply and demand inequities and put pressure on gasoline prices, but the blackout resulted in the temporary closure of three refineries in the Midwest at a time when refinery capacity was limited. These problems, combined with the regional dependence on opportunistic imports, sharply compounded existing supply concerns, thus creating inequity between supply and demand for gasoline. This inequity was apparent in the latter weeks of August, leading to rapid price advances in the cost per gallon of gasoline.

Historically, an increase in the U.S. average retail price for gasoline is caused by one of two inter-related factors. Either it can be traced to a large increase in the price of crude oil stocks from which gasoline is refined, or it is related to constriction of the supply in the finished product, e.g., inadequate refined product to meet demand.

The relative apparent stability of crude oil stock prices during this period though at a higher price than reported over the last several years, added to concerns over this price advance but apparently wasn't directly related to the events in the latter half of August, for the reasons cited above.

Supply problems for refined product were unusually widespread. The best explanation for this phenomenon is that with already short refined inventories, available refined product wasn't sufficiently plentiful to fully replace lost refinery production capacity and meet the newly imposed demand.

Because of shipping times, imports, a key component of the Northeast market, were unable to be quickly mobilized to meet this need and replenish inventories. It should be noted that international suppliers are typically opportunistic, according to the EIA, and ship excess product for resale on the spot market in New York Harbor, though there are some direct shipments to Connecticut. In a situation of sudden demand, such supply may not be available -- or if available it may be rapidly re-priced as there are no long term expectations imposed on those buyers.

As a result, product from domestic suppliers was quickly exhausted. Demand did not abate and prices rose accordingly.

Gasoline Distribution and Sales in Connecticut

Gasoline is not refined in Connecticut but is transshipped to the state from domestic or overseas suppliers structured principally around New York Harbor[5]. Gasoline gets to the Harbor either through pipeline connections or ocean-going vessels as indicated above. Most of this product is then barged in as needed to New Haven Harbor with rack terminals servicing truck-based distributors in the New Haven area directly or by pipelines north from the Harbor to terminal racks around Hartford. Limited amounts of fuel products used in Connecticut are also trans-shipped through Bridgeport and Providence, RI harbors.

Much, if not all of these sales are done through contract to the distributors from the terminal rack meters, which in turn transport the product to retail service stations. Most of Connecticut wholesalers and retailers have adopted "Just-In-Time" marketing strategies calibrating supply to need. Deliveries vary, but most stations appear to get between four and eight deliveries a month with busier stations approaching daily deliveries[6]. It is our understanding that a good station on a busy corner can retail between a million and a million and a half gallons of gasoline per year[7].

Price Gouging

In times of fuel price advances regardless of the type of fuel discussed, the issue of "price gouging" comes to the forefront. It did in our experience after 9/11 and in almost every price advance before and since that time. Classically, the term refers to a situation where a seller seeks an exorbitant price for a product other than what would normally result from day-to-day market forces.

However, the term and its implications extend from a *disruption of normality,* which makes it difficult to define accurately or deal with in a coherent manner. In a free market, classical economic theory dictates that when the forces of supply and demand are incongruent, prices change, either positively or negatively, to

[5] On occasion Connecticut does receive product from overseas but apparently most of the product sold in the state originates in New York Harbor.

[6] According to the industry, typical tank capacity for an average service station is @ 8,000 gallons with the typical delivery slightly under that capacity at 7,700 gallons.

[7] The numbers can be a little stunning but considering that there are 1605 licensed gasoline stations in Connecticut and according to the Department of Revenue Services these stations retailed @ 1.5 billion gallons of gasoline in FY' 2002 (latest year available, this number excludes farm and government sales) puts the average annual per station sale of gasoline close to a million gallons.

restore equilibrium. Consumer expectations seem to run counter to this, in that prices shouldn't rise above an "acceptable" level.

Misunderstandings in the consumer's mind about the gasoline business and the system capacity figures partly in this. As indicated above wholesalers and retailers have adopted "Just-In-Time" inventory strategies and have the storage capacity to deal with short-term, expected volume needs. In order to meet current needs most stations receive regular deliveries on a bi-weekly or more frequent basis[8]. The distributors structure their system in a similar way, storing only enough for expected short term needs.

As may be anticipated by this strategy supply disruptions are rapidly transmitted through such a system. Volatility in the market as well as a need to reduce overhead dictates this approach, as confirmed by wholesale industry representatives. The fear expressed by the wholesalers is to be caught with a large amount of supply in a down market, and having to store that supply for an ongoing cost, until a better market appears, or to sell that product at a loss. However, if supply is calibrated to immediate needs and costs increase, these increases can and are passed on to the consumer with the risk of loss minimized. While there may be short term profit potentials, most suppliers seem to prefer a system of calibrating supply to need and therefore, aside from marketing and distribution costs, the risks for profit or loss are manageable and the expected profit from sales is stable and predictable.

This is not to say that price gouging cannot occur, but it does appear to be limited to rare instances in the retail sector. In our experience if there is security in supply and enough of the retail vendors maintain appropriate market prices, those outlets engaging in pricing irregularities quickly resolve themselves according to the demands of the market or else face a reduction in their business[9]. It is also our experience that the public is very quick to express their dissatisfaction with such practices, providing effective social opprobrium to such practitioners.

How the Market Works

"Fungible" is an interesting word with roots in the Latin word fungi, to perform. It is defined in the dictionary (*Webster's II, New Riverside University Edition*, 1984) as "being of such a nature or kind that one unit or part may be exchanged or

[8] It has been reported that some high volume facilities receive delivery on a daily basis.

[9] A business that may be based more on seeking profits from food or other services. Some of the largest gasoline retailers in the state are convenience stores and appear to work in this fashion, seeking only costs or minimal profits on gasoline.

substituted for another unit or equal part to discharge an obligation." What it means in practical terms is that fungible commodities such as refined petroleum products are relatively indistinguishable from one another and a loss in one area can be quickly and easily made up from other sources, making such products as good as cash. The implication is that in times of demand a fungible commodity can and does go to the market that provides the highest price for the product.

The everyday implication for our market in the Northeast, which is so dependent on opportunistic suppliers from overseas (45% of the daily gasoline needs according to EIA), and has such limited excess system capacity is that if there is an interruption in supply to worldwide or national markets it can and does have an immediate impact on the price of such commodities in Connecticut. This results in the rapid re-pricing of the product in the state. It is particularly relevant given the limited capacity in the system and the ongoing series of deliveries that have to be made to keep the system functioning.

Gasoline and other petroleum commodities are bought and sold on the New York Mercantile Exchange (NYMEX). NYMEX is one of six exchanges operating in the United States and one of the two pre-eminent markets in the world engaged in trading contracts in energy futures. Trading is done either by "speculators" or "hedgers" through an instrument known as a futures contract, a legally binding agreement between a buyer and a seller for delivery of a particular quantity of a commodity at a specified time, place, and price. Futures are used as a proxy for cash or physical transactions before actual purchases or sales (NYMEX, 2003). This allows the buyer to assess his costs in advance of purchase and the seller to value his inventory in advance of sale, a process called "hedging." Hedging allows someone to offset the risk of fluctuating prices when that person buys or sells a commodity.

Someone who holds futures contracts may sell those contracts or wait until they expire, and then make or take delivery through the Exchange at a warehouse or location designated for an Exchange delivery. In the case of heating oil or gasoline, the specified location is New York Harbor. Hedgers use futures to help stabilize their revenues or their costs. Speculators, on the other hand try to profit by buying low and selling high (or vice versa), taking a position in the futures market and hoping the market moves in their favor. Hedgers hold offsetting positions in the market for the physical commodity; speculators do not. But speculators do provide liquidity to the market and ensure its functioning. It's important to note that the Exchange does not set the price of a commodity that is the result of activities of the buyers and sellers of commodities, such as gasoline, that are traded on the Exchange (NYMEX, 2003).

"Spot prices" are different from futures contracts and depend on an informal network of buyers and sellers using NYMEX market pricing as a basis for buying and selling petroleum commodities. Such sales are opportunistic and result when excess capacity in the form of finished gasoline is brought to market.

Future and spot prices are quoted in several trade journals and on-line sources, such as the U. S. Department of Energy's *This Week in Petroleum*, and represent the price paid by buyers purchasing fuel today without benefit of long term or volume contracts. Since there are no long term commitments for purchasers or suppliers, demand more than any other factor determines the price paid for this commodity. When either oil or refined product inventory is tight and demand high, the price goes up accordingly. Most of the imports into New York Harbor are bought and sold on the spot market.

Most of the buying and selling of gasoline on the Exchange or Spot Market as well as on the state level is done through contracts. In Connecticut, this is through the various public terminals located in Bridgeport, New Haven, Wethersfield, Groton and to a limited extent, Providence, Rhode Island. Retailers' needs are met through the haulers or distributors and deliveries are usually made for most retailers twice weekly or more frequently depending on need.

Actions as a Result of the Governor's Request

Surprisingly, DCP did not see a huge immediate increase in phone calls or other complaints related to the August gasoline price advance (see Appendix). Historically, on related issues there has been an increase in calls and complaints. Why this didn't occur in August 2003 may reflect the sudden onset of the price advance or confusion about where to register a complaint. In any event, there was significant evidence in the media that there was an exceptional level of distress in the public on this issue. In the intervening months there has tended to be an increase in written complaints and sporadic phone calls about the price increase, but nowhere near what was anticipated, based on past experience.

In response to this crisis Governor Rowland issued a letter on August 26, 2003, to then Commissioner of Consumer Protection, James T. Fleming, to investigate. In response to the Governor's letter DCP initiated a survey of pricing practices at the retail and wholesale level and a survey of pricing patterns as reported by DCP staff during the first three weeks in September. The pricing survey encompassed a request for such information from a random sampling of 20% (321) of the 1605 Licensed Retail Gasoline Dealers (RGD) operating in Connecticut. A parallel mailing also went out to the 116 known fuel distributors in Connecticut. The highest price recorded by DCP staff for the period indicated above was $2.25 a gallon for regular gasoline with an average price of $1.87 per gallon reported, see Table 1.

The survey results confirm that capacity appears to be calibrated to need and that average profit margins per gallon were relatively unchanged despite the

price advances seen after August 14th. One unsolicited comment from the survey claimed that the goal for gasoline sales in their establishment was to make costs. Presumably their business model reflects the fact that profits from this business come elsewhere, either from convenience sales or auto servicing.

Prices since that time have apparently declined, albeit slowly, since the peak prices seen in August.

Survey of Pricing Practices

Inspectors from the Food & Standards Division surveyed prices for a period of three weeks following the Governor's letter. There were over 800 separate surveys conducted with over 2700 observations made during that period. Below are the summarized results:

Table 1, Summary of DCP Price Survey conducted during the first three weeks in September, 2003.

Octane 87	Octane 89	Octane 91	Diesel
Median Price	Median Price	Median Price	Median Price
1.87	1.96	2.05	1.69
Average Price	Average Price	Average Price	Average Price
1.87	1.97	2.05	1.69
Max Price	Max Price	Max Price	Max Price
2.25	2.91*	2.95*	2.20
Min Price	Min Price	Min Price	Min Price
1.55	1.65	1.75	1.49

* Readings were taken at the same station

OPM Analysis

Price practice data submitted to DCP was examined cursorily and did not appear to be indicative of pricing irregularities. This data was subsequently forwarded on to OPM for further analysis. OPM concurred with DCP's opinion about the lack of evidence of pricing irregularities. One vendor's information[10] was singled by the OPM analyst as representative of the data submitted, see Table 2.

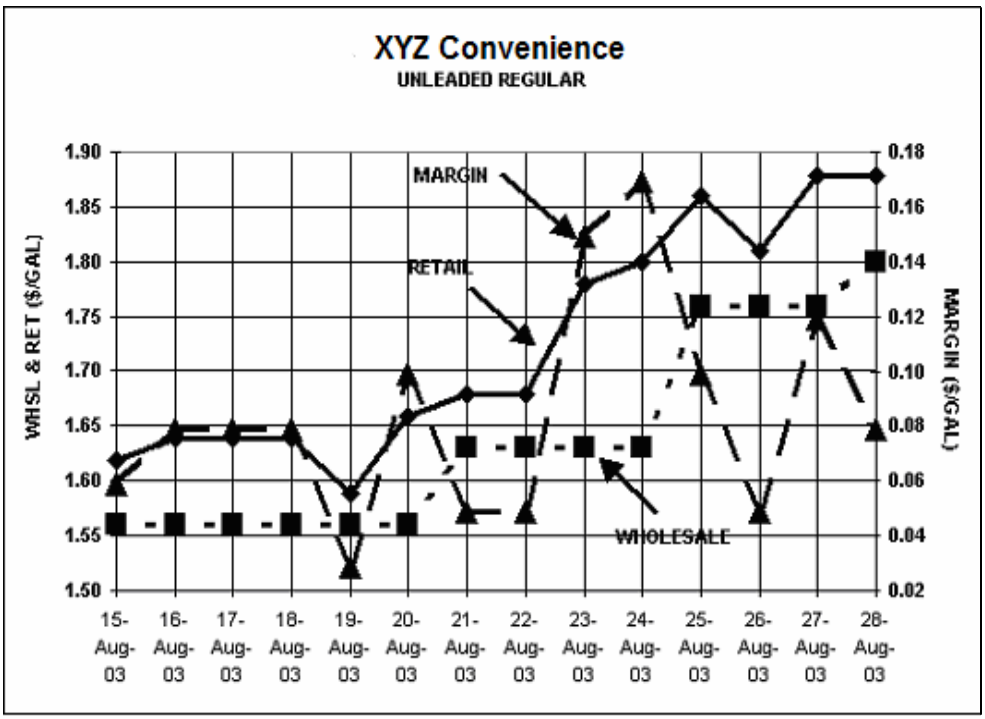
[10] Identification information has been changed.

Table 2, Summary of data submitted by XYZ Food Store

	DELIVERIES			RETAIL			EST MARGIN		
	REG	PLUS	SUPER	REG	PLUS	SUPER	REG	PLUS	SUPER
DATE	$/GAL	$/GAL	$/GAL	$/GAL	$/GAL	$/GAL	$/GAL	$/GAL	$/GAL
14-Aug-03				1.619	1.719	1.819			
15-Aug-03	1.560	1.620	1.690	1.619	1.719	1.819	0.059	0.099	0.129
16-Aug-03				1.639	1.739	1.839	0.079	0.119	0.149
17-Aug-03				1.639	1.759	1.859	0.079	0.139	0.169
18-Aug-03	1.560	1.620	1.690	1.639	1.759	1.859	0.079	0.139	0.169
19-Aug-03				1.589	1.709	1.809	0.029	0.089	0.119
20-Aug-03				1.659	1.759	1.859	0.099	0.139	0.169
21-Aug-03	1.630	1.690	1.760	1.679	1.779	1.879	0.049	0.089	0.119
22-Aug-03				1.679	1.799	1.899	0.049	0.109	0.139
23-Aug-03				1.779	1.899	1.999	0.149	0.209	0.239
24-Aug-03				1.799	1.899	1.999	0.169	0.209	0.239
25-Aug-03	1.760	1.820	1.890	1.859	1.959	2.059	0.099	0.139	0.169
26-Aug-03				1.809	1.909	1.999	0.049	0.089	0.109
27-Aug-03				1.879	1.979	2.079	0.119	0.159	0.189
28-Aug-03	1.800	1.860	1.930	1.879	1.979	2.079	0.079	0.119	0.149

The table shows the wholesale prices of the company's deliveries and its daily retail prices as well as daily margin estimates from this data during the period of interest. Because of timing considerations and inventory issues, the estimated margins are only approximations, but according to the OPM analyst they are reasonable ones. The table also provides an appropriate format to graphically analyze the data see Figure 2. Figure 2 shows the wholesale and retail prices as well as the margins. The prices are graphed on the left axis and margins on the right.

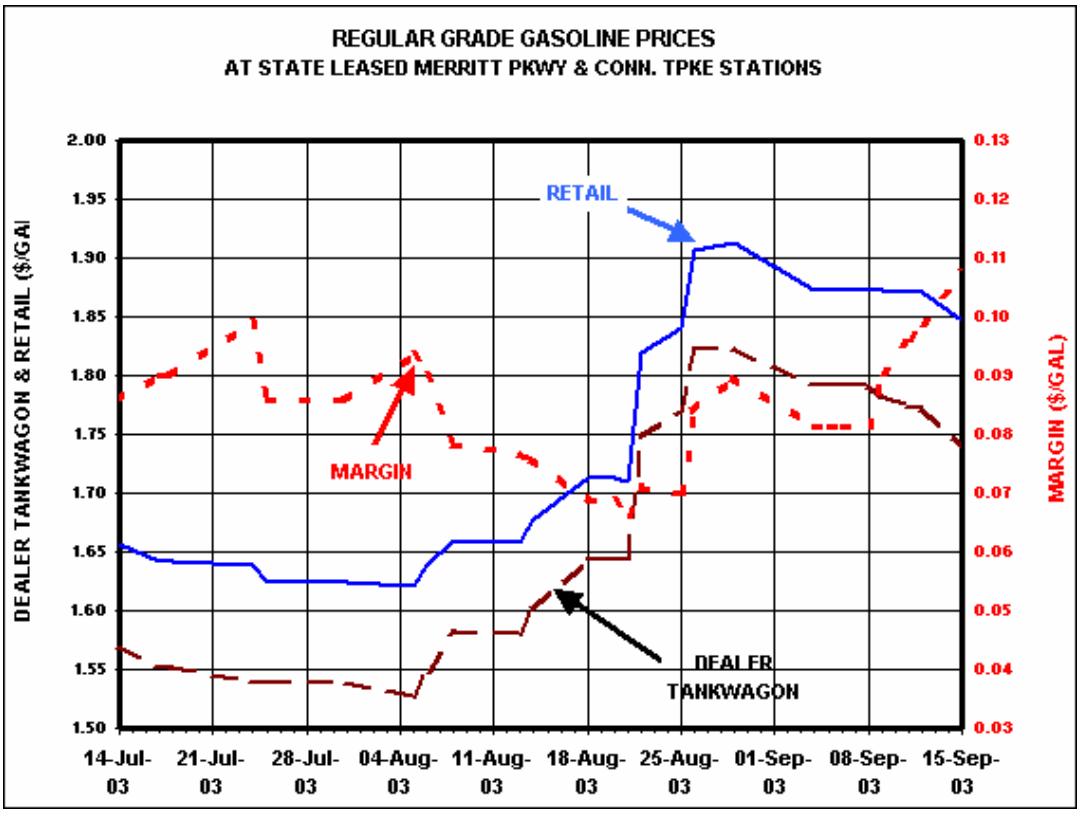
Figure 2, OPM Chart on Selected DCP Supplied Information



It was noted by the OPM analyst that nothing in the chart looks suspicious or abnormal. Sudden sharp changes in the margins are probably the result of timing problems using new delivery prices and the daily retail prices. Retail prices are following wholesale prices. It was noted that while the margin does temporarily rise, it does return to approximately its initial level.

Information was also supplied from OPM on prices and margins for the state leased gasoline stations on the Merritt Parkway and Connecticut Turnpike. Results are summarized in Figure 3.

Figure 3, OPM Chart on Gasoline at State Leased Stations



OPM has been following the above information for the past six years and the information presented demonstrates that nothing appears to be suspicious or out of order.

Conclusions

As a result of our investigation, distribution and marketing margins did not appear unusually high, and there is no apparent evidence of price gouging. Whether or not speculation had a role in the rapid price increase is beyond the ability of the Department to determine. Attorney General Blumenthal has urged such an investigation in a letter to Secretary of Energy Spencer Abraham, see Appendix.

As a result of our efforts there appear to be a number of factors driving gasoline prices higher in the latter half of August:

- Lower inventory of crude and gasoline stocks going into a season where demand was expected to be high and at a record level. The causes for this were multiple: geopolitical instability; nationwide problems related to supply; and a colder than expected winter resulting in more stock conversion to heating oil than gasoline.
- Localized disruptions in the power supply that had nationwide implications on refinery output. As indicated above, refinery output in the Midwest appears to have been compromised by the blackout during a time of increased demand, which apparently wasn't able to be met by the remaining refineries.
- Disruptions and shortages in the western states that placed pre-existing price pressure on gasoline.
- Lack of system capacity to accommodate short term disruptions. Refineries as mentioned above are a key component in capacity but imports as well have an important function in the overall market in fuels for the Northeast. The majority of these imports are from opportunistic suppliers not regularly engaged in and accountable to the system other than seeking a market for excess inventory. Most are located overseas, and while demand would dictate a ready market, transport time would have to be accounted for, and in times of high demand the product would be expected go to the area with the best price.

Recommendations

The resolution of future difficulties associated with unwarranted or rapid price advances ultimately depend on either supply or demand. Areas related to supply can be addressed in-state or regionally. As has been recommended elsewhere, Connecticut should explore the establishment of either a state or regional fuel reserve. Cooperative options may be explored with surrounding states, and as a first step it is suggested that a cost benefit analysis of the utility of having such a reserve be explored. Such a reserve addresses the need for capacity, an issue that has always generated ongoing concern but with the proximity of New York Harbor, the main Northeast transit hub for fuels, this concern has not been translated into action. However, reductions in system capacity, the increased dependence on imported supplies, and transit delays in getting such supplies rapidly to areas of need may dictate a need to revisit this issue.

Connecticut's congressional delegation should be pressed to encourage planning on a regional and national basis for contingencies related to supply disruptions. Tax and other policy options can be created to ensure that there is additional reserve capacity at refineries so as to increase the system tolerance to partial shutdowns.

Examinations of the supply system also need to be undertaken, to document critical points and posit solutions to monitor those critical points in order to minimize disruptions of product flow to the state.

Demand is always the more painful but ultimately, probably the most fertile area for resolving current difficulties. President Bush has said on a related energy issue that "It's becoming very clear to the country that demand is outstripping supply, that there are more users of [energy] than there are new units being found, and we've got to do something about that in the country."

Transportation has and continues to be the driving force behind demand for gasoline. On a state level, this may be addressed in the form of differential tax policy aimed at discouraging use and encouraging alternatives in the form of public transportation, carpooling, telecommuting, alternative work schedules and in the personal transport vehicles chosen. It is recommended that public transportation, changes in work rules, encouraging telecommuting and other policies to discourage unnecessary transportation be looked at by the legislature.

Our federal legislators should also be encouraged to look at keeping and expanding the current tax incentive for hybrid vehicles. Currently, the Internal Revenue Service allows purchasers of such vehicles as the Honda Insight, Honda Civic Hybrid and the Toyota Prius to be eligible for the "Clean Fuel" tax deduction of $2,000, an incentive that is set to be phased out in 2004 to 2006.

Encouragement can also be given to federal legislators to re-examine the Corporate Average Fuel Economy (CAFE) standards and the exemptions under those standards as a means of discouraging use.

It may also be in the interest of the state to have statewide incentives on hybrid or alternate fuel vehicles. A full or partial property tax or sales tax exemption for owners and purchasers of such vehicles should be studied by the legislature.

Continued support should be provided for the development, use and promotion of alternative fuels. Fueling stations for natural gas powered vehicles has and continues to be a barrier to the promotion of such vehicles. Efforts by the legislature should be focused on studying and removing barriers to such fuels.

Legislative actions that can be addressed by DCP concern the resolution of the conflict in regulations on petroleum pricing under 42-110b-29, Regulations of Connecticut State Agencies and 42-230 thru 42-233, Connecticut General Statutes. The former uses “abnormal market disruptions” as the basis for action and the latter is predicated on a declared “emergency.”

References

Bush, George W., “Remarks by President George W. Bush at Energy Policy Meeting,” Jan 29, 2001

California Energy Commission, “Causes for Gasoline and Diesel Price Increases in California,” September Monthly Update

California Energy Commission, “Reducing California’s Petroleum Dependence,” August 2003

Economist, “End of the Oil Age,” October 23, 2003

Economist, “Will the Oil Run Out,” February 6, 2001

Energy Information Agency, “Preparations for Meeting New York and Connecticut MTBE Bans,” October 2003

Energy Information Agency, U. S. Department of “Summer 2003 Motor Gasoline Outlook,” Spring 2003

National Renewable Energy Laboratories, “Consumer View on Transportation and Energy,” August 2003

National Petrochemical & Refiners Association, “United States Refining Capacity,” January 1, 2002

U.S. Department of Transportation, “Fuel Options for Reducing Greenhouse Gas Emissions from Motor Vehicles,” September 2003

U.S. Department of Transportation, “Greenhouse Gas Reduction through State and Local Transportation Planning,” September 2003

U.S. EPA, “Reformulated Gasoline,” EPA420-F-99-040 November 1999

U.S. Senate, Permanent Subcommittee on Investigations, Committee on Governmental Affairs. “Gas Prices: How are They Really Set?” May 2002.

www.fueleconomy.gov, US EPA, US DOT, US DOE combined site on fuel economy

www.eia.doe.gov, US DOE Energy Information Agency Website

www.nymex.com, New York Mercantile Exchange Website

Appendix

- August 26, 2003 letter from Governor John G. Rowland to Commissioner James T. Fleming
- August 26, 2003 letter from Attorney General Richard Blumenthal to Energy Secretary Spencer Abraham
- Wrap-up Code Report on DCP fuel related calls
- OPM Gasoline Survey thru October 2003